Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems	ET Docket No. 04-37

COMMENTS OF THE CITY OF MANASSAS, VIRGINIA

The City of Manassas, Virginia ("City") submits the following comments in response to the Commission's above-captioned Notice of Proposed Rulemaking, FCC 04-29, released February 23, 2004 ("NPRM").

The City of Manassas applauds the Commission's initiative in recognizing the significant benefits that can be derived from the deployment of Broadband over Power Line ("BPL") services. BPL has the potential to increase the availability of broadband services to homes and business, particularly in rural areas where such access is either limited, costly or unavailable. In markets where broadband access is available, BPL will help to increase the competitiveness in the broadband market-place, which in turn will help drive down prices for consumers and encourage innovation. BPL has the added benefit of improving the quality and reliability of electric power delivery and service by enhancing existing outage notification systems and assisting in automated metering, line monitoring, and load control. The City supports the Commission's conclusions in paragraph 48 of the NPRM, and believes that the NPRM appropriately addresses signal interference concerns, while advancing further BPL deployment.

In July 2002, the City instituted a pilot program to study the feasibility of BPL as a platform for the delivery of high-speed Internet access to Manassas residents. The pilot project

developed as a partnership between the City, the American Public Power Association ("APPA"), and Main.net. The City provided the distribution system and fiber backbone, while APPA helped fund the project through a DEED (Demonstration of Energy-Efficient Development) grant program. Main.net provided the technology, equipment, and network support. The BPL technology employed in Manassas makes available to subscribers high-speed Internet access from any electrical outlet by simply using a BPL modem. Participants in the pilot program were enthusiastic about BPL's plug and play feature allowing users greater portability because customers using their BPL modems can gain access to the Internet at any electric outlet in the City.

After completion of its pilot program, the City issued an invitation for franchise bids requesting a franchise to provide the city-wide deployment of Broadband Over Power Lines making high speed BPL internet access available to every resident and business within the City. In October 2003, the City Council awarded the franchise. Through the franchise, the grantee is supplying equipment and a final connection to the Internet and handling administrative functions such as account administration, help desk support, customer billing, network management, and system monitoring. The City, through its municipal utility, will continue to have responsibility for the installation and maintenance of BPL equipment outside the home or business and the fiber optic backbone. The Manassas Utilities Department will also provide 24/7 emergency service on the equipment. Service is now being commercially deployed on a city-wide basis and will be available to all residents and businesses who choose to subscribe. It is currently available to about 3,000 homes. The BPL service available in Manassas currently offers speeds of 300-900 kilobits per second.

Through its franchise, Manassas is the first municipal utility in North America to facilitate Internet access through BPL technology. City residents and businesses benefit from having a reliable and cost-effective alternative to DSL and cable modem service. Further, BPL allows for additional uses of the electric system already being funded by the citizens of Manassas. The BPL technology being rolled out in Manassas also benefits the electric utility by taking the utility's existing outage notification system further down in the distribution system and thereby improving the reliability of the electric system. The two-way nature of BPL technology provides virtually real-time outage notification for both Internet and electric services. The outage notification system not only allows the utility to pinpoint which houses are affected by an outage, it also provides notification when the lights go back on. Additionally, BPL technologies can facilitate automated meter reading and load control.

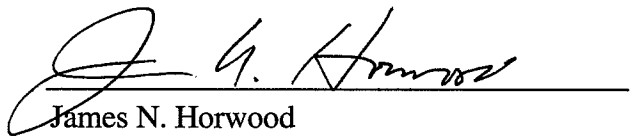
While the City is encouraged by the benefits derived from BPL technology, it remains sensitive to the concerns held by amateur radio operators.[1] The BPL system in Manassas is in compliance with the FCC's Part 15 rules, and the technology employed in Manassas effectively allows for mitigation of harmful radio interference if mitigation should become necessary. The City supports the Commission's findings that the current Part 15 non-interference requirements and emissions limits, along with the proposed changes and additions, will meet the dual goals of adequately protecting licensed spectrum users and facilitating the deployment of BPL technology.

Paragraph 42 of the NPRM asks for comment on "the appropriate period of time we should allow for BPL systems to come into compliance with any new requirements that we may

[1] As described in the attached April 15, 2004 letter from Allen P. Todd, P.E., Director of Utilities of Manassas, to James R. Burtle, Chief, Experimental Licensing Branch of the Commission, the City has met with members of the Ole Virginia Hams Amateur Radio Club to discuss their concerns and has established a dialogue with them that is continuing.

adopt pursuant to this rule making proceeding." That paragraph also asks for comment on "whether Access BPL systems currently deployed should be required to be brought into compliance with the new rules, and if so, what period of time should be afforded for them to come into compliance." The City is unable to respond to these questions without knowing the nature of any new requirements that may be adopted. If the new requirements do not require the addition of new facilities or significant software modifications, then a relatively short time period (such as 30 days) would be appropriate. If, on the other hand, substantial investment would be required, a longer period would be necessary and such requirements should not necessarily be imposed on existing Access BPL systems depending on the investment required and the nature of the problem being addressed. A practical concern would be the time by which equipment to meet new requirements would be commercially available. If the Commission were to adopt the Proposed Rules and Proposed Measurement Guidelines attached to the NPRM, or rules and guidelines that are similar, a 30-day period for compliance would be practical and appropriate.

Respectfully submitted,



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May 3, 2004

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April 15, 2004

James R. Burtle
Chief, Experimental Licensing Branch
Federal Communications Commission
Gettysburg, PA 17325

Dear Mr. Burtle:

Thank you for forwarding to the City letters from Ms. Ruth Frock, President, Ole Virginia Hams (OVH) Amateur Radio Club Inc. and from Amateur Radio Operator, Mr. George V. Tarnovsky, who is also a member of the OVH Club. Both letters expressed their concerns regarding possible radio interference caused by Broadband over Power Line (BPL) deployment in Manassas.

Before responding to their concerns, let me first describe the deployment of BPL in the City of Manassas. In October, 2001, The City of Manassas was awarded a grant by the American Public Power Association (APPA) for initiation of a pilot project to evaluate the delivery of high speed internet service through the City's existing electric distribution system. During this project, the City utilized the existing fiber optic network and newly developed Broadband over Power Line (BPL) equipment provided by Main.net communications, to construct a communications network. The network delivered high-speed internet access to residential and commercial participants of the pilot. During the project, participants enjoyed the ease and flexibility of high-speed internet access through a modem plugged into any electric outlet in their home. Throughout the project, participants made favorable statements regarding their use of this new technology. The speed, portability, ease of installation, and reliability were welcomed features of the system to project participants.

Through the success of the pilot project, the City demonstrated the advantages and feasibility of using BPL technology for the delivery of broadband services. Likewise, Manassas citizens indicated their desire to utilize a new technology for accessing the internet. The knowledge and experience gained from the pilot, as well as the successful customer experience of the pilot participants, compelled the City to push forward with a full-scale deployment of BPL.

Today, the City of Manassas is only using BPL equipment provided by Main.net. Main.net's BPL technology has been tested by an A2LA accredited third party test laboratory which has determined that Main.net's devices comply with the FCC's rules for unlicensed equipment, which are designed to prevent interference to amateur radio operators and others.

The City of Manassas began commercial deployment of the BPL network in February 2004 and access to the internet is currently available to 2,000 homes, with another 1,000 homes scheduled by the end of April.

Mrs. Frock, as President of the OVH Amateur Radio Club, requested in her letter that a dialogue be established and that Mr. Bob Zaepfel be the point of contact for the OVH club. Mr. George Tarnovsky is also a member of the same club.

On March 23, 2004, a meeting with OVH members was held at the City of Manassas Public Works Facility. In attendance at this meeting were:

City of Manassas:	Allen Todd, Director of Utilities John Hewa, Assistant Director Electric Utilities
Main.net:	Joe Marsilii, CEO and President Zack Burrows, Technician
OVH Club Members:	Bob Zaepfel George Tarnovsky Don Blasdell

This meeting provided an opportunity for the amateur radio operators to discuss their concerns and to learn about the City's deployment of BPL. Discussions included a presentation of the Main.net BPL technology being used in Manassas, topology of the BPL network, a demonstration of how BPL modems can be programmed to filter sections of the radio spectrum, and a demonstration of how BPL equipment is installed on the Manassas power system.

Following that meeting, the City and the amateur radio operators agreed to meet again to visit specific BPL sites. Along the same lines of cooperation and understanding, the City agreed to have BPL installed at the home of Mr. Zaepfel. With BPL in his home, Mr. Zaepfel will be able to monitor the compatibility of BPL equipment operating in close proximity to his amateur radio station.

On April 6, 2004 the City met again with amateur radio operators Zaepfel, Tarnovsky, and Blasdell for the purpose of visiting BPL sites in the City where radio noise had been previously identified by operators. The first site visited was an overhead BPL installation on Weir Street. After verifying that the BPL repeaters were operating, the club members, using their monitoring equipment, were unable to identify any interference in the amateur bands being caused by BPL installation.

Next, we visited another overhead installation (a pole mounted BPL repeater) on Signal Hill Road. At this location, mild noise could be periodically detected using their intricate monitoring equipment. The mobile ham radio in my car was not sensitive enough to detect any interference. As the vehicle with the radio club monitoring equipment moved away from the pole, any noise that could be detected was attenuated within approximately 60 – 70 feet.

In the near future, we are planning another site visit with OVH club members to monitor operation of BPL equipment at an underground installation in the Wellington area. We are confident that with continued dialogue, the City of Manassas and Ole Virginia Hams Amateur Radio Club, along with other amateur radio operators, can come to an amicable resolution of their concerns. Please be assured, the City of Manassas is committed to operating the BPL system in a way that demonstrates our sensitivity to all spectrum users. We will continue to monitor for possible interference, and in the event that interference does become a problem, we will work to mitigate the impact. I would like to commend the OVH Radio Club for their diligence in ensuring that amateur radio is protected, and remains a viable and effective means of communication for the future. As a ham radio operator of 46 years (W4VUB) I have certainly benefited from my avocation and I am well aware of the important role that amateur radio plays in the community.

With the application of BPL technology and successful deployment of BPL to the citizens of Manassas we would like to invite FCC representatives to visit Manassas and monitor the operation of the BPL network. Please feel free to contact me if you require additional information or if I can be of further assistance.

Sincerely,

Allen P. Todd, P.E.
Director of Utilities

Cc: Ruth Frock, President – OVH Amateur Radio Club
Bob Zaepfel – OVH Amateur Radio Club
George Tarnovsky – OVH Amateur Radio Club
Don Blasdell – OVH Amateur Radio Club